

FLEXIBLE REMOTE DATA MIRRORING

RELATED APPLICATIONS

The present application claims priority to, and incorporates by reference, the following

5 commonly owned copending applications: serial no. 09/438,184 filed November 11, 1999; serial
no. 60/209,469 filed June 5, 2000; serial no. 60/223,934 filed August 9, 2000; serial no.
60/262,143 filed January 16, 2001. [^] now pat # 6,116,621

FIELD OF THE INVENTION

10 The present invention relates to the remote mirroring of digital data from a server or other
computer in order to provide better fault tolerance and/or disaster recovery, and relates more
particularly to tools and techniques for increasing the flexibility of remote data mirroring.

TECHNICAL BACKGROUND OF THE INVENTION

15 United States Patent No. 5,537,533 describes tools and techniques for remote mirroring
of digital data from a primary network server to a remote network server. A system according to
that patent includes a primary data transfer unit with a primary server interface and a primary
link interface, and a remote data transfer unit with a remote link interface and a remote server
interface. The primary link interface includes a spoof packet generator capable of generating a
20 pre-acknowledgement for the primary network server. That is, the system has a "smart buffer"
which gives the primary server a pre-acknowledgement or "spoof" after mirrored data has been
stored on a nonvolatile buffer in the primary link interface and before an acknowledgement
arrives indicating that the mirrored data has been stored by the remote server.